

Stability and Moral Exclusion: Explaining Conflict in Timber-Dependent Communities

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Abstract

Economic and social dislocations in Northwest timber-dependent communities during the last fifteen years resulted from industrial restructuring pushed by global competition, stock manipulations, technological modernization and environmental regulations. Timber community instability and resultant social conflict are linked to cultural issues nestled in differences in community resiliency, internal diversity in production relationships, industrial profitability rationales and the management of scientific information. Previous studies used terms such as “traditional,” “community stability,” “timber dependency,” and “moral persuasion” outside of defined community contexts and unrelated to local environmental conditions, which led to unwarranted generalizations about combatants within post-1985 industrial restructuring in the Northwest. This study of a northwest Montana timber county examines connections between structural issues and exclusionary cultural mobilization, suggesting that hyper-contextualization may provide a deeper research avenue than previous universalized studies.

Keywords: moral exclusion, environmental conflict, industrial restructuring, community stability

Introduction

The symbolic and ideological conflict over forest resources in Lincoln County, Montana, from 1985-1993 occurred in response to factors perceived as destabilizing to the county's three timber-dependent communities of Troy, Libby and Eureka. These perceived threats included environmental regulations, labor strife, excessive timber harvests, and new scientific evidence indicating forest habitat degradation. This paper presents findings concerning public conflict in timber debates in Lincoln County using a three-tiered investigation that included direct participation in issues, matched random and purposive surveys, and a profitability/production analysis of national forests and private lands during 1960-1994. After examining the study area and par-

ticipants in timber debates, the paper demonstrates how inter-community differentiation encouraged a cultural struggle over old growth management in the early 1990s. This contextualization draws attention to attitude and behavior patterns that distinguish local environmentalists from the majority of county residents. Building from the structural differentiation between communities and the subcultural characteristics of environmentalists, the paper constructs a theoretical explanation for the inevitable growth of rhetorical conflict, here called moral exclusion, in which scientific information became an antagonist rather than a mediator in the public discourse over endangered species and forest management.

Examination of localized socioeconomic structures of timber communities reveals them to be differentiated by their specific relations of production, community social organization, level of dependency on natural resources and economic diversity (Freudenburg 1992; Kaufman and Kaufman 1946; Le Master and Beuter 1989; Machlis, Force and Balice 1990; Power 1996). Some timber communities have structural advantages over others. For example, technological differences in mill and harvesting machinery combine with company bidding strategies and restrictions from environmental regulations to promote intra-regional competition between timber companies. Local conditions impact, but do not necessarily determine, multi-national decisions to restructure respective corporate divisions and lumber mills to maintain profitability. Restructuring decisions are closely linked to national housing market trends and international production levels. During certain production cycles, a global cost-price squeeze between rising retooling costs and industrial overproduction drives corporate activity towards the colonization of less regulated regions of the world, a process that leaves Northwest timber communities destabilized with high unemployment levels (Freudenburg 1992; Freudenburg et al. 1998).

Both declines in forest resources and the imposition of increased environmental restrictions after 1985 (Dumont 1996; Flowers et al. 1994), particularly in Northwest old growth groves associated with the spotted owl, provided

direct impetus for the retooling of regional mills. Investment into laser mill technology geared toward the harvest of small diameter logs competitively disadvantaged timber communities that continued to harvest large diameter old growth forests. Laser technology is low-labor intensive and its introduction produced high unemployment levels and weakened the strength of timber industry unions. Concurrently, escalating public oversight and internal controversy in management agencies questioned congressionally mandated production levels (Sedler et al. 1991) and the sustainability of timber harvests in terms of their effects on wildlife (AFSEEE 1989).

The rise of social conflict in timber communities throughout the Northwest after 1985 directed attention towards issues of what Robert Lee (1989) called “stable communities” rather than “community stability.” In place of a concentration on sustainable production levels, Lee suggested in a series of works (1989, 1990, 1993, 1994) that the study of normative stability in timber communities undergoing rapid structural change was as critical as structural analysis in comprehending the intensity of timber conflicts in the Northwest. Lee’s adaptation of Opatow’s (1990) conceptual framework of *moral exclusion* to timber conflicts offers a means to examine the symbolic importance of the clash of “jobs versus the environment” that continues to be a divisive force within so many timber communities (Freudenburg 1998; Lee 1994; Moore 1993; Summers 1992).

Moral exclusion is the use of rhetorical symbols to delegitimize opponents in a way that justifies their exclusion from political participation in management decisions or from the economic benefits of natural resource extraction. Opatow (1990, 1) emphasizes that moral exclusion places individuals and groups “outside the boundary in which moral values, rules, and considerations of fairness apply.” Environmentalists delegitimize hardworking loggers by valuing endangered species survival over human subsistence and, in the process, justify environmental reforms that impose cultural destabilization and economic insecurity on logging families (Lee 1989, 1994; Summers 1992). Moore (1993) paints the cultural debate as double-sided with the spotted owl being a “representational ideograph” that simultaneously represents incongruent ideological positions for loggers and environmentalists. Neither side’s viewpoint is particularly related to the “scientific issues” of threatened owl survival or the use of owl population density as a valid indicator for the health of old growth habitat. Instead, Moore believes that both perspectives use the symbol of the owl to invoke in-group solidarity. This *moral inclusion* is partially sustained through boundary maintenance that not only excludes “others” from in-group membership but also excludes in-group collective recognition of exterior facts that bear on the local natural

resource conflict. Moral exclusion thus provides a means for sub-group mobilization (Coser 1956; Collins 1974, 1993), but not necessarily in accordance with objective environmental, social or industrial conditions.

Previous Studies

This report emphasizes post-1985 occurrences in timber communities. The implementation of national forest plans after 1985 under provisions in the National Forest Management Act of 1976 offered the means for environmental challenge to public forest management procedures. Previously, industry had adjusted frequently to construction booms and busts, forest resource declines, federal management policies, and environmental regulations without significant social conflict (Dumont 1996). Following 1985, both environmentalists and loggers developed sophisticated, mobilized resistance in which efforts to delegitimize opponent protests against federal timber harvest programs were characterized by moral exclusion.

Most sociological studies of timber communities developed in relation to the effects of spotted owl management in coastal rainforests of California, Oregon and Washington. Lembke (1976) and Marchak (1979, 1984) opened the debate on industrial restructuring by pointing out that modernization of technology in the timber mills of California and British Columbia, particularly for composite products, permitted increased volume production but reduced employment simultaneously. This reverse relationship between technology and jobs appeared in numerous other investigations (Bailey et al. 1993; Flowers et al. 1994; Freudenburg 1992; Freudenburg et al. 1998; Machlis and Force 1988; Power 1996; Summers 1992). Studies after 1988 routinely noted the damage done to local culture and social organization by technological change, single resource dependency and environmental restrictions (Freudenburg et al. 1998; Lee 1989; Machlis, Force and Balice 1990; Warren 1992; Zaslowsky 1990).

Earlier social analyses into timber community conflicts presented timber shortages as socially constructed limitations on industrial output rather than as empirical ecological problems (Brulle 1996; Lee 1989, 1994; Moore 1993). In their view of sustainable forestry, habitat modification rather than habitat degradation had occurred. However, three independent studies by environmentalists reinitiated interest in environmental factors. The National Audubon Society funded an old growth field verification survey in Oregon, Washington and Montana that demonstrated that effective old growth habitat on federal lands counted significantly fewer acres than claimed by federal agencies. A Montana study that reached Congress and raised concern over “Phantom Trees” suggested that standing mature timber was greatly over-

estimated by the Forest Service in inventory reports sent to Congress to set mandated harvest levels (Sedler et al. 1991). A bull trout inventory by the Alliance for Wild Rockies showed significant post-harvest declines in bull trout survival rates in Montana and Idaho. These combined with federal agency studies of threatened spotted owl and grizzly bear populations to apply pressure for volume reductions on federal lands in the early 1990s.

Concern over the adaptive flexibility of logging communities to cutbacks resulting from federal management regulations led to a series of studies on community stability. Lee (1989) and others reviewed an early study by Kaufman and Kaufman (1946) of two timber communities in northwest Montana as an exemplary investigation of natural resource dependency. Kaufman and Kaufman examined three levels of social-ecological relationships: sustainable forest management, the production objectives of private industry, and the stability of local social institutions. They recommended increased public input into forest management decisions, the diversification of community relations to timber production, sustainable harvest practices on private timberlands and increased concern over social impacts of management decisions. However, "the one empirical sociological study of a timber-dependent community ... was not well received by the Forest Service and was largely ignored until recently" (Lee 1989, 30).

As timber debates heated up in the late 1980s, a growing number of researchers turned to the measurement of environmental attitudes and longitudinal behaviors. Fortmann and Kusel (1990) measured pro-environmental propensities between old and new residents of forest communities, finding similarities in positive attitudes among newcomers and older residents but stronger sentiments among women. Machlis and Force (1988) found that the operationalization of "community," "stability" and "dependency" led researchers to approach sociocultural values from distinctly different perspectives and to reach different conclusions. They suggested the need to stress resiliency and transition in analyzing community stability and attitudes.

The case study presented in the following pages, taken from the Lincoln County site in northwest Montana of the Kaufman and Kaufman study, addresses four weaknesses in the cited literature. First, the inability of previous studies to connect cultural studies to serial² cross-community studies overlooked inter-community differentiation. Operationalizing communities as whole units and aggregating them over counties or regions (Machlis, Force and Dalton 1994) obscures the cultural dynamics in timber debates. Second, universalizing corporate restructuring decisions as industry-wide fails to reveal central factors that affect community resiliency. Diverse local timber production allows

adjustments to market fluctuations and changes in resource availability regardless of environmental regulations. Third, previous use of moral exclusion outside of a localized context led to "ideal-type" stereotypes of timber debate combatants rather than providing the thick description necessary to analyze moral engagement. In post-1985 timber debates, moral exclusion first and foremost played a role in controversy over the legitimate role of scientific investigation in resource management. This local critique by loggers redirects attention towards issues of the relativity of scientific positions and the validity of a particularized voice (Heidegger in Zimmerman 1990; Lee 1994; Plumwood 1993; Warren 1996). Finally, previous studies failed to acknowledge the early 1980s integration of environmental roles within industrial structures as a means to assure forest industry sustainability. In fulfilling tree planting and forest inventory roles essential to industrial survival, roles that predated the old growth controversy, environmentalists operated within, not outside, the forest management structure during the conflict. Timber community organizers found it difficult to attack the scientific claims of environmentalists whose job was to understand the condition of forest habitat. The Lincoln County situation suggests that moral exclusion evolved as a tool of the timber industry to assist the mobilization of diverse communities against environmental scientific claims.

The Study Area and the Combatants in the Timber Debate

Lincoln County lies in the northwest corner of Montana where it leads state counties in annual timber production (DSL 1995). In two years in the early 1990s, Lincoln County led the nation in timber production from national forests. The Kootenai National Forest (KNF) and significant private timberland dominate landownership in the county. Annual private and public harvests from Lincoln County and the KNF averaged 288 million board feet (mmbf) from 1972-1994, 64% from public lands (Clark 1995). From 1985-1994, seven mills in four counties and two states with an annual milling capacity of over 800 mmbf vied for contracts on the KNF. The excessive mill capacity above sustainable harvest levels insured an active competitive bidding market between timber companies.

In the 1980s, structural differentiation in timber relations characterized the county's three communities of Libby, Eureka and Troy (see Table 1). A single, unionized sawmill and plywood plant dominated Libby's lumber production while Eureka counted numerous non-unionized, diversified timber industries that included two sawmills, a chip plant, and a large cedar post and rail operation. Troy lacked a lumber mill, its several short experiments with mills over the

years never successfully competing with the nearby large sawmill operation in Libby (Kaufman and Kaufman 1946; Edgar 1994). As the seat of county government and in its role as regional service center, Libby contained the county's most diversified workforce. Both Kaufman and Kaufman's early study and Edgar's recent one found that Troy suffered unique economic disadvantages, evidenced by higher unemployment, greater impoverishment and a sense of social anomie and frustration at its perpetual weakness in the face of economic dominance by Libby. Eureka, located some 70 miles from Libby, remained independent from the influence of the strong Libby economy maintaining close industrial ties to Canada and the Flathead Valley of Montana.

Several major environmental and structural occurrences brought instability to communities in Lincoln County from 1985 to 1994. A massive lodgepole pine beetle epidemic

encouraged the Forest Service to expand its road system into a remote area along the Canadian border known as the Yaak. The Yaak is one of five designated grizzly bear recovery areas in the Rocky Mountains and the need to harvest lodgepole clashed directly with Endangered Species Act protection for grizzly habitat. Under Reagan programs to downsize government, the Forest Service cut costs by increasing the size of timber sales.³ This resulted in the elimination of small loggers (*gyppos*) from competitive bidding and enlarged gyppo dependency on company ties. Proposed Wilderness Area designations (1985) and the implementation of the KNF Plan (1987) raised fears that wildlife standards would limit harvests and destabilize local economies. Eight years of drought and several large fires pressured the government into salvaging smaller diameter trees while appeals by environmentalists led to tighter restrictions on old growth harvests.

Table 1. Structural Characteristics in Lincoln County Communities.

	LIBBY	EUREKA	TROY	CRG
Urban Population	3574	1214	984	
Economic diversity	- county government - service center - community college - wilderness area - ski area	- ranching community - gambling industry - wilderness area	- wilderness area - guiding services	
Relations to timber production	- one huge lumbermill - one rural sawmill	- one industrial mill - one medium mill - woodchip mill - large cedar mill	- no lumbermill - two rural sawmills - small cedar mill	- tree planting - forest inventory
Forest Service districts* *Libby, Canoe Gulch consolidated in 1996	- Supervisors Office - Libby District - Canoe Gulch	- Rexford District - Fortine District	- Troy District	
Employment categories				
Millworker	20.5%	11.8%	5.7%	0%
Logger	9.1%	19.6%	17.1%	3%
Forest Service	4.5%	8%	11.4%	15.2%
Service	35.2%	19.6%	20%	30.3%
Retired	27.3%	23.5%	22.9%	12.1%
Families with woods workers	18.4%	54%	50%	48.9%
Importance of timber income				
critical	55.7%	54.9%	40%	12.1%
supplemental	19.3%	13.7%	14.3%	33.3%
unimportant	25%	31.4%	45.7%	54.6%
Income level				
1-10,000	20.5%	13.6%	28.6%	9.1%
10-20,000	26.5%	27.3%	34.3%	27.3%
20-30,000	30.1%	31.8%	14.3%	15.2%
> 30,000	22.9%	27.3%	22.9%	48.9%
Families with unemployment	28.4%	25%	40%	15.2%
Party affiliation				
Independent	42.7%	44.6%	50%	31.2%
Democrat	36.6%	31.9%	26.5%	56.3%
Republican	20.7%	19.1%	20.6%	9.4%

Finally, Reagan/Bush administrative support for free trade lowered tariffs against Canadian softwood imports, producing a cost/price squeeze which limited industrial investment in technological modernization and contributed to the industrial competitive shakedown throughout the Northwest (Freudenburg 1992; Freudenburg et al. 1998). These forces weakened the bidding advantages of the large old-growth dependent Libby mill, which faced the need to invest in small log technology at a time when import competition was lowering national lumber prices. Even without considering direct effects of environmental regulation, a restructuring of local industrial relationships seemed inevitable.

A useful view of intra-regional competition comes from looking at the changes within the industrial structure of Lincoln County during the period under consideration (Table 2). The Libby mill lost its dominant role in production due to diminishing supplies of old growth, while a chip mill in Eureka, a small diameter log mill in Libby, and an exclusively salvage-oriented mill outside of Troy stepped up production. Competitive bidding between companies drove stumpage prices — the bid price companies paid for the rights to cut standing trees under government contracts — to record heights. Profits spiraled downward (Clark 1995).

Environmental pressure also increased during the 1980s. The Cabinet Resource Group (CRG) formed in the early 1980s in response to efforts to construct two dams on the Kootenai River. A local coalition of interests stopped the proposed re-regulation dam above Libby and the Kootenai

Indian Tribe intervened to protect Kootenai Falls as a sacred site. In both cases CRG played a central role in the opposition, a role local papers rhetorically ascribed to “no-growther” anti-development forces. CRG concentrated on water quality, mining and wilderness issues in the mid-1980s, only belatedly becoming involved in forestry decisions with the implementation of the KNF Plan in 1987, the Upper Yaak Environmental Impact Statement in 1988 and the Kootenai Accords in 1989.⁴ President Reagan’s veto of a Montana Wilderness Bill that included local environmental proposals for wilderness designations and KNF plans to hike harvest levels led CRG to participate in regional forest-watch activities, though CRG remains known today as one of the more independent and locally-focused environmental groups in the state.

These structural and oppositional events combined with numerous timber sale appeals, the indecisiveness of the forest management planning process, and new state and federal water quality and wildlife regulations to undermine the sense of stability for Lincoln County citizens. How were environmental attitudes and sense of social instability related? Both demographic and structural differences within and between the communities needed to be examined in relation to the growing body of scientific evidence concerning forest degradation and economic conditions. How did the public natural resource debates respond to concrete conditions and how did they reflect the need for in-group mobilization in the face of growing economic instability? By studying the inter-relationship of structure and culture in timber debates, the linkage between moral exclusion, environmental decisions and community stability could be judged. The conclusion presented here is that *along with* productive structures and economic hardship from industrial restructuring and imposed environmental regulations, exclusionary politics involving complicity between community loggers and the industrial elite *are also necessary* to explain the unity of opposition to environmental regulation in Lincoln County around 1990.

The Study Methodology

The county’s three communities of Troy, Libby and Eureka provide an excellent source for the study of timber debates due to the existence of serial community studies (1946, 1953, 1990, 1992, 1993, 1994, 1995), the high profile of social conflict within the communities, and the advanced levels of organization of both loggers and environmentalists within the conflict over timber management. Previous sociological (1946, 1992, 1993) and agency (1953, 1990) studies indicated community differentiation in industrial relations and natural resource attitudes dominated Lincoln County relationships.

Table 2. Timeline of structural changes in mills buying KNF timber.

1982	First appeal of Yaak timber sales.
1983	St. Regis begins massive harvest of private lands to reduce value of standing timber stock and to improve cash flow potential of the mill by increasing inventor.
1985	St. Regis Paper Co. sells its Libby lumbermill to Champion International. Cash-poor Champion exacts a \$3/hour wage cut from union to help finance its purchase.
1987	Forest Plan implementation begins.
1988	Libby millworkers join regional strike to regain wage cuts of 1985.
1988	Yaak injunction stops 11 mmbf sale in Upper Yaak timber sales. Yaak FEIS process begins.
1990	New by-product pellet plant opens in Eureka.
1990	Yaak FEIS is finally finished but it is appealed.
1993	Louisiana Pacific opens small log mill in Libby.
1993	Champion closes Libby mill and sells mill to a California company and its timberlands to Plum Creek mill of Eureka.
1994	Libby mill reopens under Stimson Lumber Company but sawmill is parted out and sold, leaving only advanced technology plywood plant in operation.
1994	WI Forest Products in Bonners Ferry, Idaho, is sold and shut down.
1994	Yaak timber sales approved by court and harvest begins.
1995	LP mill in Thompson Falls, MT is sold and shut down.
1996	LP small log mill in Libby closes.

This paper presents the findings of a 1988-95 investigation into the timber debates in Lincoln County built from a four-tiered investigation: (1) direct participation in the timber debates as a member of a local environmental group; (2) a 1994 random, county-wide telephone sample whose survey instrument examined the following: demographics; environmental, recreational, and forest practices; attitudes towards forest management and concerns over community stability; (3) an industrial production/profitability analysis using state and federal production and pricing records from 1960-1994; and (4) a written purposive sample mailed to the membership list of the local environmental group, the Cabinet Resource Group (CRG). The latter was required when local environmental activists who played central roles in local timber debates failed to show up in the stratified sample of the county.⁵ The random sample permitted survey validation through comparison with previous serial surveys while the purposive survey allowed direct cultural comparison (attitudes and behaviors) between the general populace of the three communities and the population of people willing to identify themselves as environmentalists during the heat of the timber controversy. The revealed cultural differences could then be contextualized or placed within historical events, structural relationships, and environmental conditions to determine the roles that moral exclusion and increasing environmental regulation played in political events from 1985-1994.

The production/profitability study aggregated state and federal production figures for harvests from private timberlands in the county and the Kootenai National Forest. These were compared with national lumber price trends and Montana stumpage bid levels, converted to 1994 constant dollars using Department of Commerce price deflators for each year. This analysis allowed a general comparison of profitability of northwest Montana production to other areas of Montana and a comparison between private and federal timber harvests in relation to lumber prices. From the combination of this data and historical occurrences such as strikes, housing recessions, and timber sale appeals it became possible to theorize about the effects that environmental regulations had on local production and industrial restructuring decisions. This was possible because, for the most part, environmental regulations affected harvests from public but not private timberlands.

As a final methodological point, I must address the issue of my personal "voice" since I operated as a participant in the timber debates of Lincoln County for fifteen years. During that period, I planted 200,000 trees on the KNF, worked six seasons performing timber inventories on the KNF under contract and wrote a citizen's ecosystem alternative included in the Upper Yaak FEIS. Precisely because of the social conflict encountered during that effort, I turned to sociology and

the application of scientific investigative techniques to understand socioecological conflict. I adapted the survey reported here to include issues raised by previous surveys in Lincoln County by other sociologists, but I also chose not to disregard knowledge gained while working on the KNF. The questions asked during the survey reflect personal experience both as an activist and as forest technician, presenting areas I felt fundamental to the local context of the timber debate. Other local voices may well have asked the questions differently or chosen other topics for focus. Information on historical events was collected during my seven years of activism in Lincoln County and from documents reviewed later as a sociologist. I caution readers to consider, as feminists and post-modernists have pointed out, that the voice of participants in unfolding events are rarely the same as the views of outside "objective" third-party social scientists who must reconstruct historical developments from the testimony of others. The complex multi-leveled analysis of this study speaks for my desire to preserve as much objectivity as possible. The telephone survey, supported by the Norcross Wildlife Foundation, operated through the University of Montana and the callers received training and pay as investigators. The demographic results mirrored those of the Lincoln County Canvass (Edgar 1994) done the previous year, thus validating the survey's ability to provide an accurate voice for attitudes in the county at large.

Differentiated Community Structure Results

The structural and demographic community profiles are provided in Table 1. Libby, a one company union town, voted Democratic and was service oriented. Eureka traditionally voted Republican (a reality contradicted by respondent independence voiced here), shared its timber industry with ranching and enjoyed the county's highest income levels. Troy remained politically divided, the most impoverished, and had the highest rate of unemployment (see also Edgar 1994; NCC 1992). Eureka and Troy had similar timber employment dependency, with Eureka's greater mill capitalization indicated by its higher mill employment. Combining Libby with the other two towns in aggregated statistics is somewhat problematical from a demographic and structural standpoint.

When general forest and community stability attitudes are brought into the equation, all three communities take on a separation not apparent in demographics (Table 3). Eureka residents participate more in public meetings but worry much less about the influx of "outsiders" moving into the area than Troy or Libby. They feel the most economically stable in spite of a high concentration in timber employment. Libby's stronger belief in the instability of its community (92%) reflects the closing of the Libby sawmill six months before

Table 3. Stability and Conservation Attitudes.

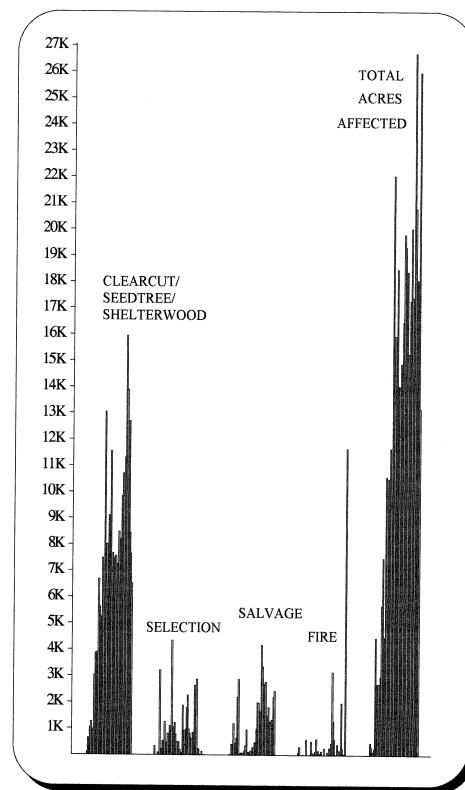
	LIBBY	EUREKA	TROY	CRG
Demographics				
Years of family residency	32.60	28.00	26.20	13.60
Family members work in woods	18.4%	54%	50%	51.6%
Community Stability				
Public meeting participation in last 3 years	25%	44.9%	34.3%	65.7%
% worried about outsiders	37%	20%	72%	27%
% who believe community is stable	5.7%	23.5%	11.4%	18.2%
% optimistic about the future	41.8%	32.6%	14.3%	63.7%
Conservation Attitudes				
Timber industry unsustainable at current levels	40.2%	40.4%	60%	72.7%
Public schools should teach conservation	75%	77%	89%	100%
Importance of timber dollars to family income	critical	critical	critical	critical
	55.7%	54.9%	40%	12.1%
	suppl.	suppl.	suppl.	suppl.
	19.3%	13.7%	14.3%	33.3%
Environmental Behavior				
Recycle aluminum often	73.3%	42.9%	60%	87.9%
Recycle other products often	20.6%	12.9%	9.5%	66.5%
Common family forest uses (county-wide random survey)				
hiking	30.7%	75.8%		
hunting/fishing	64.6%	48.5%		
berry picking	30.2%	21.2%		
cross country skiing	8.3%	54.5%		
Forest Management Issues				
Road closures provide necessary big game habitat	35%	50%	29%	90.9%
Forest Service should manage for Grizzly bear habitat	21.2%	24%	28.5%	87.5%
Should be fewer clearcuts	67%	57%	82%	97%
Need more small sales	68%	66%	72%	78.2%
Log exports hurt local economy	76%	42%	72%	88.3%

the survey — but this negative attitude is mitigated by Libby's highest level of optimism for the future found in all three towns. Troy, on the other hand, was extremely negative about the future economy of the county and about the sustainability of timber harvests. Kaufman and Kaufman's (1946) finding of social anomie in Troy seems particularly deeply rooted in its structural weakness within the county, just as Eureka's relative confidence is structurally based in high income levels and industrial diversity.

The results of the economic analysis (Charts 1-4) help us to judge the effects of environmental regulations on industrial productivity during the 1980s and 1990s (Clark 1995). Chart 1 shows the cumulative effects on the KNF from tim-

Chart 1

Acres Affected by Harvests and Fire 1961-1993
Kootenai National Forest

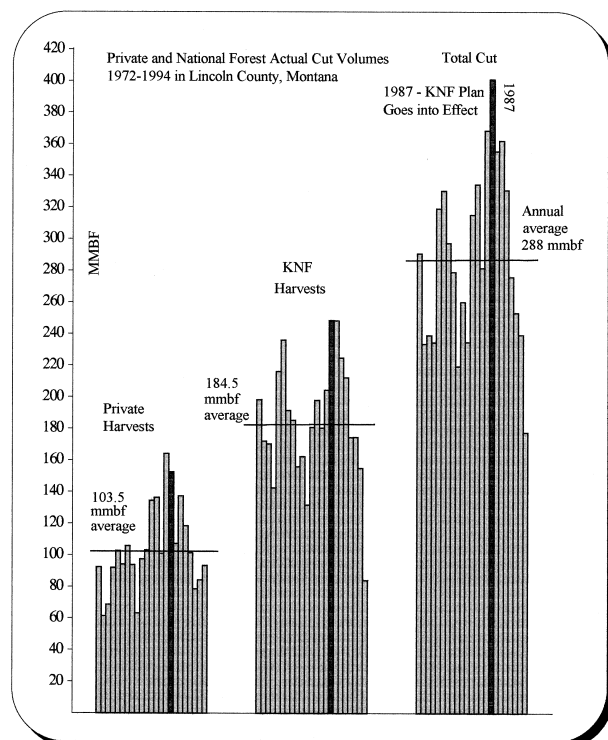


Source: "Timber Cut and Sold on National Forests Under Sales and Land Exchanges," USDA Forest Service 1995.

ber harvests from the years 1961-1993. Combining the various forms of harvest with the effects of fire clearly supports environmental concerns over escalating cumulative risks to forest habitat on the KNF. Chart 2 illustrates private and public forest harvests from 1972-1994, showing that after 1988, harvests fell dramatically from both private and public land in spite of environmental regulations primarily affecting federal lands. There was no effort on the part of industry to make-up supposed lost volume by harvests from private lands after 1986. The reason can be observed in Chart 3. Stumpage prices rose rapidly but national lumber prices fell until 1991 when they rebounded. Critical to this discussion is that the differential between stumpage and lumber prices dramatically crashed in 1987, introducing the most severe cost/price squeeze in the last thirty-five years. However in comparison with other Montana forests, this *did not happen as significantly on the KNF* where the cost/price differential fell less than 30% in 1989 and then leveled out and recovered slightly (Chart 4). During the peak period of timber controversy and industrial restructuring, then, corporate rates of profits dropped dramatically nation-wide, but Kootenai Forest profit

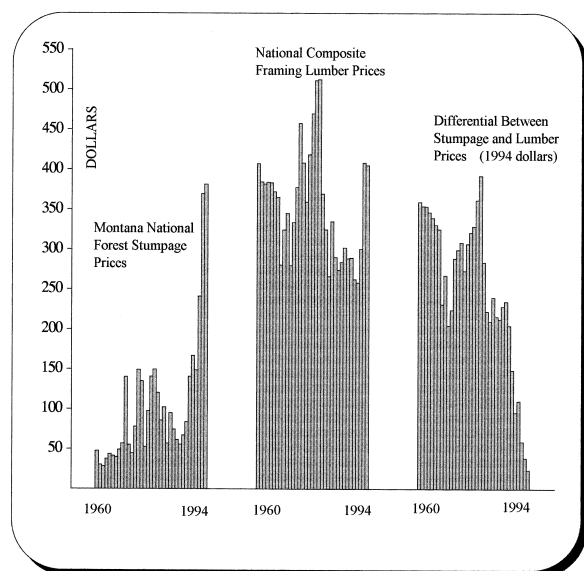
Chart 2

Timber Harvests near the Kootenai National Forest



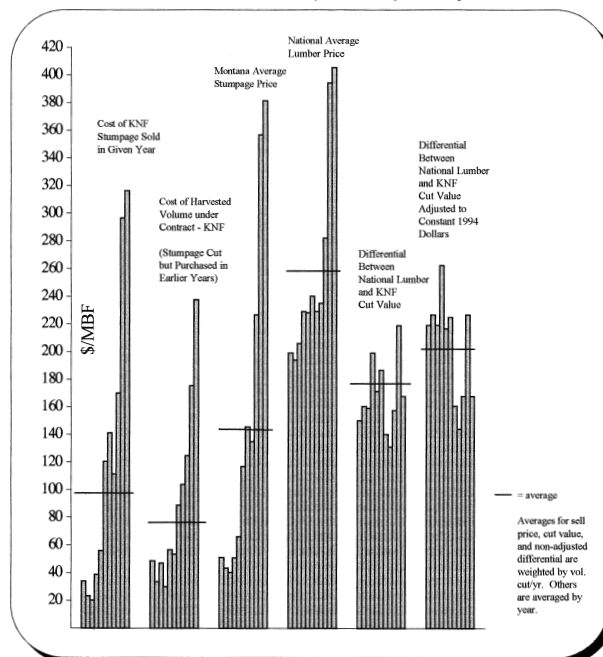
Sources: "Region One Timber Sale Program Statistics," USDA Forest Service 1995, and "Timber Cut from Private Lands," State of Montana 1995.

Chart 3

Stumpage - Lumber Price Differentials
(per 1000 Board Feet in 1994 Dollars)

Sources: Bureau of Business and Economic Research, University of Montana 1995, based on information from the USDA Forest Service Northern Region and from Random Lengths, Eugene, Oregon.

Chart 4

Timber Profitability Chart 1984-1994 on the
Kootenai National Forest for Years during Corporate Liquidation of
Volume under Contract (1984-1991) and Beyond

Sources: Montana National Forest Winning Bid Stumpage Prices, compiled by the University of Montana, Bureau of Business and Economic Research; Nationwide Composite Framing Lumber Prices, Random Lengths, Eugene; Timber Cut and Sold on National Forests Under Sales and Land Exchanges, USDA Forest Service; Implicit Price Deflator for Personal Consumption Expenditures, US Department of Commerce. Compiled by the Forest Committee, Cabinet Resource Group, Noxon, Montana.

rates remained relatively stable. This data might have ameliorated local concerns over community stability, but it did not prevent industrial decisions to close three of the seven mills cutting KNF timber.

Statistics show environmentalists to be a separate subpopulation altogether, some of which are presented in Table 1. They vote more strongly Democratic, make higher incomes on the average, face less unemployment, are more educated and optimistic, and work in logging and millwork much less than the countywide population. They engage more often in public debates, recycle frequently, have forest use patterns emphasizing recreation rather than utilitarian uses, and give more support to public expenditures for conservation education and recycling. These differences reinforce Lee's perception that the 1980s back-to-the-land movement changed the cultural characteristics of timber communities and introduced pressures towards cultural instability in traditional logging towns (Lee 1989).

Moral Exclusion and Environmental Attitudes

The evidence thus far presented indicates that contextual complexity characterized Lincoln County when it arrived

at the brink of timber conflict in 1985. The three communities held divergent relations to production, to politics and to income security. Industry had already begun an international restructuring that involved issues of log exports to Japan, softwood imports from Canada, and the introduction of laser technology and subsequent job layoffs without production declines. Junk bond markets and corporate stock raids encouraged timber companies to liquidate old growth to diminish company net worth as a protective measure against take-over. Simultaneously, old growth mapping by the Audubon Society and sustainability studies by northwest Montana environmentalists pressured for sale reductions and towards the harvest of smaller diameter trees. Management's ability to promote timber sales bogged down due to responsibilities to salvage wood from fires and beetle infestation while still meeting contradictory Congressionally-mandated output demands and restrictive environmental regulations (Congressional Record, June 29, 1995, H6617). Hardworking timber communities faced the need to mobilize for economic survival, but how? The formation of a united front against environmental regulations demanded that internal contradictions such as political party divisiveness and long-standing resentment from Troy's weak county position be resolved. Moral exclusion and the construction of shared cultural values about political rights and proper behavior by *delegitimizing the values of one's opponents* provided the three timber communities a means with which to unify against perceived environmental threats.

At the heart of the Lincoln County campaign was its opposition to "outsider" control over (what should be) "local" forest decisions. The timber industry/logger coalition successfully used three rhetorical representations or *synecdoches* (Moore 1993) around which to organize - "grizzlies," "locked gates," and "outsiders" — to bridge the county's demographic and production gaps. These representations proved resilient even as the specific management issues changed during the years to come. Table 4 illustrates the symbolic disparity of these issues to the communities and environmentalists in Lincoln County. "Grizzlies" and "locked gates" questioned the scientific validity of Forest Service management. The grizzly issue challenged habitat protection under the Endangered Species Act whose legal priority over all other management decisions held the power to adversely affect timber harvest volumes. The open roads issue opposed limitations on the public's right to access forest resources around forest-dependent communities. Loggers, whose Communities for a Great Northwest (CGNW) led the exclusionary campaign, linked positive values associated with the "traditional American family" to small logging operations (*gyppos*) in its anti-environmentalism identity construction. This proved an effective political

Table 4. Forest Attitudes Concerning Synecdochal Issues.

	COUNTY-WIDE RANDOM SURVEY	CABINET RESOURCE GROUP
Supports grizzly management	23.6%	53.1%
Opposes forest road closures	58%	9.1%
Concerned about outsiders	69%	27.2%

linkage, but one which obscured industrial restructuring patterns towards large sales and hired company loggers already in the process of displacing independent *gyppos* as central to industrial decision-making in the county.

In the Lincoln County case, however, environmentalists could not accurately be labeled as "outsiders." While recognizing national pressures by environmentalists for reduced federal harvests and old growth protection, local environmentalists remained the central antagonist in forest management debates in Lincoln County into the mid-1990s. More importantly, however, *in a point sorely missed by all previous sociological investigation into timber conflicts* (Dumont 1996; Freudenburg et al. 1998; Lee 1989; Moore 1993; Summers 1992), local environmentalists already fulfilled major industrial roles in assuring timber sustainability. Not only did environmentalists, who averaged 13.6 years of county residency, monopolize nearly all public and private reforestation contracts, but they also provided under contract the timber stand data inventories used by the Forest Service and timber companies for their respective forest management decisions. The delegitimation of concerns of local environmentalists, 51.6% of whom worked in the woods, proved problematic to nascent political organizations in timber communities because local environmentalists, through their particular employment, were among the most cognizant of all players in the timber debate about actual forest conditions. The strategic solution chosen by loggers and industry was to link Lincoln County environmentalists with wider rhetorical issues.

A campaign to delegitimize science and hence local environmental validity claims developed opposition to Forest Service road closure plans (property rights infringement) and grizzly bear augmentation strategies (potential timber volume reductions). Interestingly, neither were directly related to the three central issues being pushed by local environmentalists: old growth security, water quality protection and targeting lodgepole pine salvage as a primary harvest strategy (KNF 1990) — issues chosen by environmentalists to precisely emphasize those issues holding substantial cross-cultural support. While media rhetoric against "outside environmentalists" grew locally vehement (Kootenai Valley Eagle, May 1985; Western News, May 1985), local environmentalists

began to use the evidence gained through their industrial woods work to challenge federal harvest plans. The Endangered Species Act, the National Environmental Policy Act, and the National Forest Management Act of the 1970s had laid the basis for an earlier wave of industrial/agency restructuring that had created environmentally sensitive roles in timber management procedures. Most of these roles were filled in the 1980s by environmentalists, and by agency resource scientists who, by 1985, were themselves beginning to question Forest Service output objectives (AFSEEE 1989). Only when environmentalism became a social force capable of restricting harvest volumes in the late 1980s did the need arise to exclude environmental proponents from local debates.

Evidence in Lincoln County indicates that moral exclusion arose as a strategy to develop internal solidarity in the face of downsizing and unemployment, heightened industrial competition, environmental restrictions on public lands and over-cutting on private ones (Flowers et al. 1993). In 1985, loggers initiated mobilization on two fronts. The first was a Worker's Compensation Organizing Committee aimed at equalizing cross-state disparities in payments by Idaho and Montana loggers that disadvantaged Montana *gyppos*. The second was a joint industry/logger political campaign against grizzly bear augmentation and proposed wilderness additions (Kootenai Valley Eagle, May, 1985). The anti-augmentation drive contested plans by the US Fish and Wildlife Service to reintroduce eight reproducing female grizzly bears from Canada into the Cabinet-Yaak Recovery Area. The anti-wilderness campaign struggle contested a Forest Service analysis that considered 98% of the proposed wilderness as unsuitable for timber harvest (Kootenai Valley Eagle, July 13, 1990).

Ancillary issues extended basic timber complaints to issues involving other community segments. Particularly important was the expansion of anti-road closure arguments to include access for retired seniors, seen as incapable of enjoying the forest or collecting firewood without extensive road access, and the need for motorized handicapped access. Support for all terrain vehicle access to remote forest areas brought another segment into the alliance. A proposed national forest fee system for firewood collection by the National Wildlife Foundation of Washington, DC, solidified cross-sector opposition against outside control over local resources. Organizers ascribed these positions to the "unethical" local environmental community. By expanding a sense of anomie historically-rooted in the unequal distribution of corporate power between the towns to opposition against a generalized environmentalism, the loggers forged a unified ideology that produced county solidarity in spite of growing internal contradictions which might have divided the com-

munities during industrial restructuring. This mobilization can be traced from internal organization among Montana loggers (1984) to a logger-industry compact (1985), a logger, industry and union coalition (April 1988), a region-wide industrial opposition to environmental restrictions (May 1988), to a cross-sector community concern over property rights access (1989), and then to cross-national pro-harvest organizing in Canada (1990).

Logger capability to provide strong independent political leadership to their communities after the mid-1980s derives from structural policies concerning *gyppos* by the J. Niels Libby Mill from 1950 to the early 1980s. The mill rarely bid on federal timber, allowing *gyppos* to contract directly with the KNF for stumpage then sold to the mill. In years when the KNF offered few small sales, Libby loggers survived through direct contracts with J. Niels (later St. Regis) cutting private timberlands, a socioeconomic network in which the community remained stable in spite of lumber market fluctuations and occasional union-company strife. Eureka's loggers likewise prospered, aided by the one Forest Service district inclined to offer a consistent program of small sales. Until Champion bought the Libby mill and abandoned its *gyppo* contracts by bidding directly on Forest Service sales, loggers in Lincoln County were self-reliant, confident and successful. Afterwards they remained the first two, but success declined as Champion hired loggers from distant Kalispell and the KNF greatly reduced its small sale offerings. Faced with deepening economic challenges and a weakened industrial position, loggers backed company opposition to environmental restrictions beginning in 1985 rather than seek compromise with environmentalists. This exclusionary coalition dominated county politics until wider structural and environmental events overrode the coalition's power to control local events eight years later.

Thus even setting aside potential effects from environmental regulations, significant market and structural decisions affecting the local situation were already evident. The Libby sawmill was in the weakest position in the late 1980s, having pursued an industrial policy of liquidating private old growth forests to maximize profit-taking (Flowers et al. 1993) instead of modernizing the plant for small diameter logs. The company instituted permanent lay-offs and a \$3/hour wage cut in 1985 to overcome a cash shortfall and survived a four month union strike in 1988 by keeping its profitable plywood mill operating with administrative personnel. Loggers continued to deliver logs to the mill during the strike. Large fires in 1988 and 1991 and the lodgepole pine beetle infestation turned Forest Service sales towards salvage and smaller diameter logs (Chart 1). Louisiana Pacific opened a competitive small log mill in Libby in response to demand in 1992, greatly weakening the position of Libby's

large log sawmill. In spite of repeated promises to the community to invest in the needed \$17 million renovation for downsizing the mill, Champion continued its state-wide old growth liquidation policy until 1993 when it closed the Libby plant. The plywood operations reopened in 1994 under Stimson Lumber of California, but the new company dismantled the sawmill operations.

Discussion

This article suggests three conceptual frameworks for understanding the timber debate: industrial and community structure, attitudes and subgroup culture, and the role of scientific analysis in public debates. Structural analysis explains the roots and persistence of cultural differences and their reproduction within community confrontations. Environmentalists, loggers, millworkers, industrialists and Forest Service employees perform essential roles in timber sustainability, with subcultural differences reinforcing those structural roles. In spite of years of community coexistence, environmentalists behave differently than most other members of timber communities in work, recreation, and politics. Respective views of scientific validity also divide community subgroups.

Timber debates in Lincoln County neither legitimated the particular roles of subgroups nor created common conceptual frameworks to link them together. In 1991, after six years of social conflict, negotiations over the Yaak timber sale attended by the Forest Service, a county commissioner, small loggers, environmentalists, industrialists and small mill operators offered a one-time chance for a community-wide rapprochement. Five weeks of negotiations were unable to break the stalemate between various sides. Why?

One reason was the inability to formulate agreement over a legitimate role for science in forest management. Loggers viewed science as subjective and situational, not as a neutral and objective format. The battle over environmental regulations implemented after 1985 had nearly fragmented the community into new pro-environmental alignments. Disgruntled labor unions joined environmentalists to support a wilderness proposal known as the Kootenai Accords that provoked enormous backlash from loggers and the wider communities. Continued corporate and Forest Service support for high volume harvests packaged as large sales, led some small mill owners and *gyppos* to switch support to small salvage sales being pushed by environmentalists (KNF 1990). Many Forest Service employees openly expressed environmental concerns when computer mapping and data analysis by environmentalists challenged agency allowable cut levels set by Congress. Inventory analysis and the map-

ping and field validation of old growth stands by environmentalists proceeded ahead of Forest Service capabilities to do similar studies. These two studies transferred the burden of proof on to the shoulders of the agency and threatened to introduce a new era of publicly generated science capable of setting management agendas. As the scientific validity of environmental claims mounted, loggers rejected science as an appropriate field of struggle (Lee 1994) and organized around moral and community solidarity. Between 1985 and 1990, political solidarity was forged in timber communities as a means to overcome structural differences, directed at the exclusion of agency and environmental scientific legitimacy. As scientific documentation accrued showing increased environmental degradation from the overharvest of private and public timberlands (Flowers et al. 1993; KNF 1990; Manning 1991), the industrial-logger coalition found ways to expand its three synecdoches to include property rights encroachment and family values to garner wider popular support. Local environmentalists were unable to link their observations to wider social issues.

A second reason for fractured negotiations was *moral persuasion* — pressure by environmental and scientific elites to force the transition of hardworking logging communities towards pro-environmentalism using moral arguments based in a subjective revalorization of wilderness (Lee 1994). Lee doubts that such change could occur without authoritarianism and personal liberty restraints. Groups under severe moral pressure fight back. Lee's point is well taken, but forest issues in Lincoln County are not so divisive as his analysis suggests. My survey also indicated many levels of cross-cultural unity between Lincoln County contestants: shared opposition to log exports and the overuse of clearcut harvesting methods, and support for increased small salvage sales and continued conservation education in the schools (Table 3).

Community fears of imminent job cutbacks were not unfounded. Liquidation of private forests pointed towards eventual shortfalls (Flowers et al. 1993). Environmental regulations promised further timber harvest restrictions, most notably in the old growth groves that fed Libby's large diameter sawmill. However, most proposed restrictions, particularly the road closures and grizzly statutes, were to rotate restrictions to areas without harvest, thus affecting public access but not reducing harvest volumes (KNF 1987). Overly high estimates of standing mature trees on federal land (Sedler et al. 1991) and watershed damage from overharvest of drainages on private timberland affected volumes more significantly (KNF 1993). The handwriting was on the wall — sustainability meant less volume and smaller diameter timber.

Conclusion

What emerges from the purposive survey, but missed in the random one, is the deep cultural gap between moral combatants that directs the participants to their various forms of work, recreation and attitudes towards conservation. Individualistic loggers harvest and transport trees to mills; environmentalists plant them. Loggers commute daily, rising in the dark, relying on their wives for essential support in reproducing their lifestyles (Warren 1992); environmentalists leave families, camping around a collective fire while they complete their contracts. Loggers mobilize their communities at crucial moments to show political strength; environmentalists construct detailed scientific analyses to bolster their position in management decisions. Loggers realistically fear effects from grizzly management and road closures on timber harvests; environmentalists support initiatives that only indirectly affect their industrial participation. Seen from this angle, moral exclusion appears as an outward manifestation of identity politics clashing in Northwest timber towns.

This study validates the concept of moral exclusion as a valuable theoretical contribution to community conflict theory, but only if the theoretical framework is used within specific contextual histories. The symbolic conflict over natural resources in Lincoln County responded to factors perceived as destabilizing to the timber-dependent communities of Troy, Libby and Eureka. Moral exclusion served to unify diverse timber communities and to deny the science of environmentalists control over management decisions. But the delegitimation of local environmentalists ignored their essential productive roles in the sustainability of timber industry, making internal resolution of the conflict over timber harvest impossible. Organizational efforts by loggers failed to fulfill their objectives — to keep the Champion sawmill in operation and to remove the source of opposition, environmentalists ensconced within industry itself. Whether moral exclusion can be maintained as unifying strategy over more than a brief period of community destabilization remains to be seen.

Lee's framework of moral exclusion, combined with a respect for voice, offers a means to retain, rather than lose, symbolic intensity. Both moral exclusion and the expression of particularized voice validate cultural reproduction as central to the dynamics of natural resource conflicts. I concur heartily with Lee's (1994) attempt to provide an accurate voice for hardworking residents in timber country who face upheavals in their daily realities, but consideration must be given to the industrial significance of roles that promote industrial sustainability, often filled by environmentalists. Finally, moral exclusion is applicable to a variety of situations including cross-national border conflicts and environmental justice struggles, both of which involve inter-ethnic

and cross-cultural conflict. This study demonstrates, however, that whatever the application, culture operates within structural boundaries that must be carefully analyzed to avoid stereotypes and universalized categorizations of participants.

Endnotes

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2. I purposefully use serial rather than longitudinal to emphasize that previous studies of northwest Montana communities were empirically different rather than repetitions of similar survey instruments. Conclusions are necessarily inductive and comparative in nature. The lack of longitudinal studies presents an immense obstacle to generalizable theories of stable communities in environmental sociology (ES).
3. Large sales accomplished several objectives simultaneously. They permitted rapid salvage of large areas of dead and dying lodgepole and their subsequent reforestation. They also lowered costs to the government, seen as critical as the value of salvaged lodgepole (\$10-\$40/mmbf) raised less revenue than that of previous green sales of old growth (\$140/mmbf).
4. The Kootenai Accords was an agreement between the millworkers union, the Montana Wilderness Association, and the Kootenai Alliance, a consortium of local pro-environmental activists that included the Cabinet Resource Group. The Accords, introduced by Senator Max Baucus in lieu of failed attempts by Montana residents to achieve consensus on a statewide wilderness bill, supported inclusion of roadless and non-timber lands on the KNF for wilderness consideration. The Accords died in a hail of anti-wilderness sentiment and a local vote in opposition to the agreement between organized labor and local environmentalists even though it had corporate backing by Champion International.
5. Failure by CRG members to show up in the random sample is explained by two factors. One is their diminutive numerical size in relation to the wider community. Years of intense resource conflict had isolated the group from more moderate supporters of "environmentalism" who found the conflictual nature of the debate distasteful. Second, many CRG supporters lived in Sanders County to the south, where random survey results were discarded due to procedural sampling problems. Sanders County and Lincoln County share industrial forests and both logging and forest technician contractors often work both sides of the county line.

References

- Association of Forest Service Employees for Environmental Ethics (AFSEEE). 1989. *Inner Voice* 1(1). Eugene, OR.
- Bailey, Conner, John Bliss, Glenn Howze and Larry Teeter. 1993. Dependency theory and timber dependency. Paper presented to the Rural Sociological Society. Orlando, FL.
- Brulle, Robert J. 1996. Environmental discourse and social movement organizations: A historical and rhetorical perspective on the development of U.S. environmental organizations. *Sociological Inquiry* 66, 58-83.

- Clark, Charles. 1995. *Timber Productivity and Profitability on the Kootenai National Forest 1972-1994*. Noxon, MT: Cabinet Resource Group.
- Collins, Randall. 1974. Reassessments of sociological history: The empirical validity of the conflict tradition. *Theory and Society* 1, 147-178.
- Collins, Randall. 1993. What does conflict theory predict about America's future? 1993 Presidential Address, Pacific Sociological Society. *Sociological Perspectives* 36, 289-313.
- Coser, Lewis A. 1956. *The Functions of Social Conflict*. Glencoe, IL: The Free Press.
- Department of State Lands (DSL). 1995. *Summary of Yearly Timber Production Reports, 1972-1974*. Missoula, MT: Forestry Division.
- Dumont, Clayton W., Jr. 1996. The demise of community and ecology in the Pacific Northwest: Historical roots of the ancient forest conflict. *Sociological Perspectives* 39, 277-300.
- Edgar, Patrick B. 1994. *Analysis of Data from Canvass of Citizens for Preparation of Lincoln County Comprehensive Plan*. Missoula, MT: Northwest Community Consultants.
- Flowers, Patrick J., Roger C. Conner, David H. Jackson, Charles E. Keegan III, Brian Long, Ervin G. Schuster and William L. Wood. 1993. An assessment of Montana's timber situation 1991-2010. Miscellaneous Publication No. 53, September. Missoula, MT: Montana Forest and Conservation Experiment Station.
- Fortmann, Louise and Jonathan Kusel. 1990. New voices, old beliefs: Forest environmentalism among new and long-standing rural residents. *Rural Sociology* 55, 214-232.
- Freudenburg, William R. 1992. Addictive economies: Extractive and vulnerable localities in a changing world economy. *Rural Sociology* 57, 305-332.
- Freudenburg, William R., Lisa J. Wilson and Daniel J. O'Leary. 1998. Forty years of spotted owls? A longitudinal analysis of logging industry job losses. *Sociological Perspectives* 41, 1-26.
- Kaufman, Harold F. and Lois C. Kaufman. 1946. *Toward the Stabilization and Enrichment of a Forest Community. The Montana Study*. Missoula, MT: University of Montana.
- Kootenai National Forest (KNF). 1987. *The Kootenai National Forest Plan*. Libby, MT: USDA Northern Region One.
- Kootenai National Forest (KNF). 1990. Upper Yaak Final Environmental Impact Statement. Libby, MT: USDA Northern Region One.
- Kootenai National Forest (KNF). 1993. Kootenai National Forest 5-Year Review. Libby, MT: Kootenai National Forest Supervisors Office.
- Le Master, Dennis C. and John H. Beuter (eds.). 1989. *Community Stability in Forest-based Economies*. Portland, OR: Timber Press.
- Lee, Robert G. 1989. Community stability: Symbol or social reality? In Dennis C. Le Master and John H. Beuter (eds.), *Community Stability in Forest-based Economies*, 36-43. Portland, OR: Timber Press.
- Lee, Robert G. 1990. Sustained yield and social order. In Robert G. Lee, Donald R. Field, and William R. Burch Jr. (eds.), *Community and Forestry: Continuities in the Sociology of Natural Resources*, 83-94. Boulder, CO: Westview Press.
- Lee, Robert G. 1993. From obligation to opportunism: Community decline and spotted owl protection in Pacific Northwest forests. Paper presented to the Rural Sociological Society. Orlando, FL.
- Lee, Robert G. 1994. *Broken Trust Broken Land*. Wilsonville, OR: Bookpartners.
- Lembke, Jerry. 1976. Capital and labor in the Pacific Northwest forest products industry. *Humboldt Journal of Social Relations* 3, 8-16.
- Machlis, Gary E. and Jo Ellen Force. 1988. Community stability and timber-dependent communities. *Rural Sociology* 52, 220-234.
- Machlis, Gary E., Jo Ellen Force and Randy Guy Balice. 1990. Timber, minerals, and social change: An exploratory test of two resource-dependent communities. *Rural Sociology* 55, 411-424.
- Machlis, Gary E., Jo Ellen Force and Shawn E. Dalton. 1994. *Social Indicators for Ecosystem Management*. Draft for the Eastside Ecosystem Management Project.
- Manning, Richard. 1991. *Last Stand*. New York, NY: Penguin Books.
- Marchak, Patricia. 1979. Labour in a staples economy. *Studies in Political Economy* 2, 7-35.
- Marchak, Patricia. 1984. *Green Gold: The Forest Industry in British Columbia*. Vancouver, Canada: University of British Columbia Press.
- Moore, Mark P. 1993. Constructing irreconcilable conflict: The function of synecdoche in the spotted owl controversy. *Communication Monographs* 60, 258-274.
- Northwest Community Consultants (NCC). 1992. *Report of Findings, Community Canvass for the City of Troy, Montana*. Missoula, MT: Northwest Community Consultants, Inc.
- Opatow, Susan. 1990. Moral exclusion and injustice: An introduction. *Journal of Social Issues* 46, 1-20.
- Plumwood, Val. 1993. *Feminism and the Mastery of Nature*. New York, NY: Routledge.
- Power, Thomas Michael. 1996. *Lost Landscapes and Failed Economies: The Search for a Value of Place*. Washington, DC: Island Press.
- Sedler, Liz, Jiri Doskocil, Leroy Lee and Don Vance. 1991. *A Report on Kootenai National Forest Timber Inventory Data Used for FORPLAN and Forest Plan Projections for Future Harvest*. Unpublished. Presented to the Synar Congressional Investigation Committee.
- Summers, Gene (ed.). 1992. *Persistent Poverty in Rural America. Rural Sociological Society Task Force on Rural Poverty*. Boulder, CO: Westview Press.
- Warren, Karen J. 1996. *Ecological Feminist Philosophies*. Bloomington, IN: Indiana University Press.
- Warren, Kristin. 1992. *Role-making and Coping Strategies Among Women in Timber-Dependent Communities*. MS Thesis. Seattle, WA: University of Washington.
- Webb, C.S., Ward W. Gano, Paul Logan and S. Blair Hutchison. 1953. *Impact of the Proposed Libby Dam upon the Forest Economy of Lincoln County, Montana*. Missoula, MT: Forest Service, USDA Northern Region One.
- Zaslowsky, Dyan. 1990. Sometimes a better notion. *Harrowsmith* March-April:72-79.
- Zimmerman, Michael E. 1990. *Heidegger's Confrontation with Modernity: Technology, Politics and Art*. Bloomington, IN: Indiana University Press.